for weather updates. The query may be transmitted, and response received, via the host computing device, as described herein.

Other local system services may include, but are not limited to: a navigation service that interacts with a mapping microservice to determine navigation routes and retrieve maps for the user, and a location service that interacts with a location microservice to determine an estimated location of the wearable computing device, and to update the location microservice with the estimated location. In some cases, the location service can query the host computing device for its estimated location.

Local system services **1512** may communicate directly with application programs or user interface **1511**. For example, a user messaging service may interact with a messaging application. However, in at least some implementations, local system services **1512** may be coordinated by a master service **1513**, which may implement the data routing service as described herein. Master service **1513** may act as the interface between the local services and the local message handler. Master service **1513** can therefore consolidate data output from, or input to, each local system service. In at least some implementations, master service **1513** is the counterpart local service to the gateway service of remote computing device **1580***b*.

As described herein, host computing device **1540** can provide a host personal area network service that data communicatively couples the wearable computing device and the host computing device via a personal area network. The wearable computing device **1510** has a corresponding personal area network service that data communicatively couples the wearable computing device and the host computing device via the personal area network.

Host computing device **1540** can also provide a host network service that data communicatively couples the host computing device and the remote computing devices **1580***a* to **1580***d* via the data communication network **1560**.

Host computing device **1540** can further provide a host routing service (e.g., message handler **1542** and socket module **1544**) that routes communications between the at least one remote computing device and the master service of the wearable computing device via the personal area network and the gateway service of the remote computing device **1580***b*.

In at least some implementations or embodiments, a telemetry system service may be provided at the wearable computing device that interacts with a telemetry analytics microservice at a remote computing device that receives the telemetry data.

Referring now to FIG. **19**, there is illustrated a process flow diagram for a method of data logging from a wearable computing device to at least one remote computing device via a host computing device, in accordance with some implementations or embodiments.

Method **1900** begins at **1905** with the host computing device providing a personal area network service that data communicatively couples the wearable computing device to the host computing device. At **1910**, the host computing device provides a network service that data communicatively couples the host computing device to the at least one remote computing device providing the telemetry analytics microservice.

At **1915**, the host computing device receives telemetry data from the wearable computing device, and at **1920** the host computing device transmits the telemetry data to the at least one remote computing device computing device via the network service. In at least some implementations with plurality of remote computing devices, the telemetry data is provided via a gateway service, as in the gateway service of remote computing device **1580***b*.

Telemetry data may be one or more log entry in relation to the wearable computing device, for example error log data generated by an application program or system service. In cases where the telemetry data is large, consisting of multiple log entries, the telemetry service can aggregate the plurality of log entries for communication to the host computing device at a future time. For example, the aggregated log entries can be sent at preset intervals, at a predefined time (e.g., defined by the user) or in response to a periodic or unique request from the telemetry analytics service at the remote computing device.

Referring now to FIG. **17**, there is illustrated a process flow diagram for an example method of managing communications between a wearable computing device and at least one remote computing device, using a host computing device.

Method **1700** may begin at **1720**, with the host computing device providing a message handling service, such as message handler **1542** of FIG. **15**A.

In any event, at **1704**, with the remote computing device generating, or receiving from other microservices, one or more messages for delivery to the wearable computing device, and transmitting the one or more messages at **1706**, e.g., via a gateway service.

At **1724**, the message handling service of the host computing device receives the messages and, at **1728** and **1732**, determines an action associated with each respective message. The action may be determined based on the content of each respective message, or may be based on a specific directive contained within the respective message.

For example, the message handling service may parse the one or more messages to determine a content type, such as text data or binary data. If the content type is text data, the message handling service may further process the text data, for example to generate a textual or iconographic summary of the text data. If the content type is binary data, the message handling service may process the content for uploading to the wearable computing device.

The message handling service then continues to take the respective action for each of the one or more messages.

At **1736**, the message handling service determines if the respective message is intended for immediate delivery at **1754**, in which case it may proceed immediately to **1756** and transmit the immediate delivery message. In some cases, delivery of such an immediate delivery message may prompt the message handling service to deliver previously-queued messages ahead of their scheduled delivery time.

If the respective message is not intended for immediate delivery, the message handling service may determine if the message is intended for later, or deferred, delivery. If so, the message may be put into a message delivery queue and wait for a delay period at **1748**, otherwise the message may be discarded at **1744**.

At **1752**, the message handling service may determine whether the delay period has ended and, upon completion of the delay period, proceed to **1756** and complete delivery of the messages in the message delivery queue.

At **1760**, the wearable computing device receives the messages.

In at least some implementations, the host computing device may provide a notification handling service, such as notification handler **1552** of FIG. **15**A. In such cases, the message received at **1724** may be a push notification from a notification microservice. The notification handling service